

blocked view of reels **74**. A blind spot **77** spot results from an opaque section **75** blocking a portion of the person's field of view while in position **21a**. A change in viewing position to **21b** also changes obstruction based on the relative position between person **21**, the opaque sections **75**, and reels **74**, thus hiding formerly visible portions of the mechanical apparatus—and revealing other portions (e.g., blind spot **77**) blocked from view in the previous position.

[0045] In one embodiment, a gaming machine described herein adds 3D parallax to the visual display of video reels on a gaming machine. The gaming machine uses multiple layers of video display devices, and video data displayed on each device, to provide parallax. FIGS. **4A-4C** show layered video display devices suitable for use herein. Hardware suitable for use in the layered displays will be discussed in further detail below with respect to FIGS. **4A-4C**.

[0046] The layered display devices output video data that simulates a mechanical reel game. FIG. **2A** shows video output on layered displays and configured to realistically simulate mechanical reels in accordance with one embodiment. FIG. **2B** shows the video output of FIG. **2A** separated into front and back video output, and for provision to front and back layered displays, in accordance with one embodiment. The front display device is referred to herein as proximate since it is nearer to a person in front of the gaming machine; the back display device is referred to herein as distal since it is farther from the person. While the present invention will now be shown as graphics for display on a video device, those of skill in the art will appreciate that the following discussion and Figures also refer to methods and systems for providing a game of chance and providing video data on a gaming machine.

[0047] As shown in FIGS. **2A** and **2B**, the layered displays (and video data presented on the layered displays) are configured to resemble a traditional mechanical slot machine—both a) spatially and b) using video provided to proximate display device **18a** and video provided to distal display device **18c**. In this case, as shown in FIG. **2B**, proximate display device **18a** outputs silkscreen video data that resembles a silk-screened glass, while distal display device **18c** displays five video reels **125** that simulate and resemble traditional mechanical reels. Reels **125** “spin” during game play using changing video data provided to distal video display device **18c**.

[0048] In this case, proximate display device **18a** displays video graphics that mimics information printed or otherwise disposed (e.g., silkscreened) on a glass layer disposed in front of mechanical reels in a traditional mechanical machine. These video graphics may include any information shown a tradition silkscreen. To increase realism, the video information may also include glare lines and other depictions interaction of the silkscreen with an environment around a gaming machine. Additionally, heat, airborne contaminants including dust and smoke residue, and natural aging effects causes discoloration of portions of a traditional glass panel display, particularly to silkscreens or stickers placed on its inside surface. These effects may also be simulated in video. Video graphics for the stickers may also include video fraying and video discoloration (e.g., dirt that simulates age) to enhance the realistic simulation of a gaming machine with a traditional glass panel display. Unlike a traditional glass layer embodiment, however, video display device **18a** permits displayed graphics to be changed by a gaming establishment, e.g., as desired to update, modify, or even animate the information.

[0049] Proximate video display device **18a** may include other video data **26** that resembles one or more secondary displays located within or about the glass layer of a traditional mechanical gaming machine. The secondary displays often include one or more electronic displays, e.g., multi-segment LED, LCD, “Nixie tube”, or other devices that provide numeric display. The video data on display device **18a** may then simulate these devices, and convey the information typically displayed with them such as: a number of credits on account, a number of credits wagered on in a particular reel spin, a number of credits won on the previous reel spin, etc.

[0050] Proximate display device **18a** includes transparent video window portions **15** that permit viewing of the virtual slot reels **125** that are shown on the distal video display device **18c**. Transparent video window portions **15** may include portions of a transmissive LCD driven to indicate the color white (maximum available intensity of all colors). Video data provided to displays **18a** and **18c** is spatially configured such that a common line of sight passes through each video window portion **15** of proximate display device **18a** to a video reel **125** of distal display device **18c**. Typically, as shown in FIG. **2B**, each video reel **125** is positioned on rear display device **18c** such that it is centered within a transparent video window portion **15**. This essentially duplicates the transparent windows present in a traditional fixed glass layer through which mechanical reels are viewed.

[0051] While a fixed glass is essentially transparent and attenuates only a negligible amount of the light passing through, the transmissive window portions **15** created in video display device **18a** device reduce the intensity of light passing therethrough to a greater degree due to the optical composition and constraints of transmissive displays. This effect may be reduced by increasing the intensity of light incident upon the rear surface of the panel for video display device **18a** so that the transmissive window portions **15** are perceived to be essentially transparent to a person.

[0052] Other peripheral portions of the exterior video display device **18a** show a pay table, credit information, and other game relevant information, such as whether a bonus game or progressive game is available. Unlike a traditional mechanical machine where the silkscreened information is relatively permanent, this game relevant information may be changed by simply changing the video data provided to proximate video display device **18a**.

[0053] Briefly referring to FIGS. **4A** and **4B**, a predetermined spatial distance “D” separates display screens for the layered video display devices **18a** and **18c**. As shown in FIG. **4A** or **4B**, the predetermined distance, D, represents the distance from the display surface of video display device **18a** to display surface of video display device **18b** (FIG. **4B**) or video display device **18c** (FIG. **4A**). This distance may be adapted as desired by a gaming machine manufacturer. In one embodiment, the display screens are positioned adjacent to each other such that only a thickness of the display screens separates the display surfaces. In this case, the distance D depends on the thickness of the exterior display screen. In a specific embodiment, distance “D” is selected to minimize spatial perception of interference patterns between the screens. In one embodiment, D is greater than about 1 millimeter and less than about 10 centimeters. In a specific embodiment, D is less than about 1 centimeter. In another specific embodiment, D is between about 4 millimeters and about 1 centimeter. Other set distances may be used. The actual distance used between layered video displays may vary